

REMARKS

Upon entry of the present amendment, claims 1, 2, and 5 through 8 will have been amended. No claims will have been canceled and thus claims 1-10 remain pending and are being submitted for reconsideration by the Examiner charge of the present application.

Additionally, replacement sheets for figures 2, 3, 4, and 5, are being submitted concurrently herewith. The changes contained in these replacement sheets merely clarify the features illustrated in the drawings and eliminate potential ambiguities from the drawings. These changes do not constitute prohibited matter. Accordingly, entry of the replacement sheets is respectfully requested.

Initially, Applicant wishes to respectfully thank the Examiner for acknowledging his claim for foreign priority under 35 U.S.C. § 119 as well as for confirming that the certified copy of the priority document, upon which the above noted claim for foreign priority is based, has been received in this national stage application, from the international Bureau, in accordance with PCT rule 17.2(a)

Applicant additionally wishes to thank the Examiner for considering the documents cited in the Information Disclosure Statement filed in the present application on July 21, 2005 by returning a signed and initialed copy of the PTO-1449 Form that was attached to the above noted Information Disclosure Statement as an attachment to the outstanding Official Action.

Moreover, since the Examiner has not indicated any objection with respect to the drawings in the present application, Applicant assumes that the Examiner has accepted the

drawings. Nevertheless, Applicant respectfully requests the Examiner to explicitly indicate his acceptance of the drawings in the present application.

In the outstanding Official Action, the Examiner objected to claim 2 because of a noted language informality. By the present response, Applicant has eliminated the above noted informality. Accordingly, Applicant respectfully requests that the Examiner withdraw the objection to claim 2. Additionally, Applicant respectfully thanks the Examiner for bringing this matter to his attentions so that it could be corrected.

In the outstanding Official Action, the Examiner rejected claims 1-8 under 35 U.S.C. § 101. The Examiner asserted that the claims are directed to non-statutory subject matter. In particular, the Examiner asserted that these claims only set forth abstract mathematical elements and are not directed to any real-world physical entities. Applicant respectfully traverses the above noted rejection, particularly as it may apply to the presently amended claims.

As currently amended, claim 1 is directed to a coding method of an excitation vector that is used in a coding apparatus. Thus, the presently pending claims are clearly directed to real-world physical entities rather than just abstract mathematical elements. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the outstanding rejection of claims 1 to 8.

In the outstanding Official Action, the Examiner rejected claims 1, 3, 4, 9, and 10 under 35 U.S.C. § 102(b) as being anticipated by YASUNAGA et al., (U.S. Patent No. 6, 330, 534). Claim 2 was rejected under 35 U.S.C. § 103(a) as being unpatentable over YASUNAGA et al., in view of Mitsubishi (Japanese Patent Publication No. 2000-322097).

Applicant respectfully traverses the above noted rejections and submits that they are inappropriate with respect to the combination of features recited in Applicant's claims.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of each of the outstanding rejections.

Applicant notes with appreciation the Examiner's indication that claims 5-8 would be allowable if rewritten into independent form to include all the limitations of the base claim and any intervening claims as well is to overcome the rejection under 35 USC 101. However, since Applicant submits that independent claim 1 is also clearly patentable over the references of record herein, Applicant respectfully declines to rewrite these claims into independent form at the present time. Nevertheless, the Examiner's indication is noted with appreciation.

Applicant's invention is directed to a coding method of an excitation vector of a stochastic codebook that is used in a coding apparatus and that is divided into a plurality of channels. Applicant's method comprises associating an excitation vector waveform candidate of a predetermined channel with a waveform number of an excitation vector waveform candidate of another channel or an operation result of a numerical value used to acquire the waveform number, searching for an excitation vector waveform that minimizes coding distortion using the associated excitation vector waveform candidate of the predetermined channel and the excitation vector waveform candidate of the another channel, and determining a code of the excitation vector of the stochastic codebook using a code of the excitation factor waveform obtained by the searching.

It is respectfully submitted that the combination of features recited in Applicant's claim 1 is not taught, disclosed, or rendered obvious by any of the references of record in the present application. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the outstanding rejection together with an indication of the allowability of all of the claims pending in the present application, in due course.

YASUNAGA et al., is directed to an excitation vector generator, speech coder and speech decoder. According to the teachings of YASUNAGA et al., a random code reading section and a random codebook of a conventional CELP type speech coder/decoder are respectively replaced with an oscillator for outputting different vector streams in accordance with values of input seeds, and with a seed storage section for storing a plurality of seeds.

Further, YASUNAGA et al., discloses storing a plurality of fixed waveforms, mapping each fixed waveform at a starting position, generating an excitation vector by adding the fixed waveform and generating the excitation vector by utilizing a nonlinear oscillator. However, YASUNAGA et al., does not disclose the associating of an excitation vector waveform candidate of a predetermined channel with a waveform number of an excitation vector waveform candidate of another channel or an operation result of a numerical value used to acquire the waveform number, in the claimed combination of e.g. claim 1.

Accordingly, at least for this reason, it is respectfully submitted that claim 1 and certainly those claims dependent up in claim 1, are clearly patentable over the YASUNAGA et al., reference relied upon by the Examiner in the outstanding Official Action.

Moreover, the secondary reference relied upon by the Examiner in the rejection of claim 2 does not contain a disclosure that is adequate or sufficient to overcome the above noted shortcoming of the primary YASUNAGA et al., reference. Accordingly, for this additional reason it is respectfully submitted that the claims in the present application are clearly patentable over the references of record herein.

SUMMARY AND CONCLUSION

Applicant has made a sincere effort to place the present application condition for allowance and believes that he has now done so.

Applicant has amended several of the claims to clarify the features of Applicant's invention. At least by virtue of the herein contained amendments the Examiner's language informality objection and rejection of the claims as directed to non-statutory subject matter under have been overcome.

Applicant has additionally submitted several replacement sheets of drawings to enable the drawings to more properly illustrate features of the present invention. These replacement sheets contain no prohibited new matter.

Applicant has discussed the features of the present application with respect to the claims pending herein. With regard to such features, Applicant has noted the shortcomings of the references with respect thereto. Applicant has additionally discussed the disclosure of the references cited by the Examiner and has noted the deficiencies thereof with respect to the present invention. Accordingly, Applicant has provided a clear evidentiary basis supporting the patentability of all claims in the present application and respectfully requests an indication to such effect, in due course.

Any amendments to the claims which have been made in this amendment, and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

Should the Examiner have any questions or comments regarding this Response, or the present application, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,
Toshiyuki MORII

A handwritten signature in black ink, appearing to read 'William Pieprz', is written over a horizontal line.

Bruce H. Bernstein
Reg. No. 29,027

William Pieprz
Reg. No. 33,630

January 17, 2008
GREENBLUM & BERNSTEIN, P.L.C.
1950 Roland Clarke Place
Reston, VA 20191
(703) 716-1191